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THE
PROGNOSTICS AND CRISES
OF
HIPPOCRATES.

THE
PROGNOSTICS AND CRISES
OF
HIPPOCRATES,

Translated from the Greek;

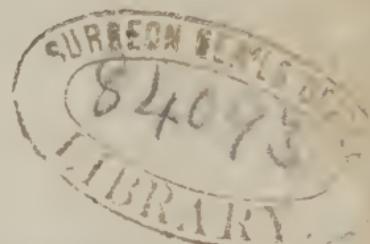
WITH

CRITICAL AND EXPLANATORY NOTES.

Ταῦ ἡγεμονίας πάντες μη ἀριστούσιν εἰναι, τοξόνοις
ἴπιτηδευειν.....HIPPOCRATES.

BY HENRY WILLIAM DUCACHET, M.D.

Licentiate of the Medical Faculty of Maryland; Member of the New-York Historical Society; First Vice-President of the Medico-Chirurgical Society of New-York, &c. &c.



NEW-YORK:

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1819.

DISTRICT OF NEW-YORK, ss.

BE IT REMEMBERED, That on the twentieth day of February, in the forty-third year of the Independence of (L. S.) the United States of America, HENRY WILLIAM DUCACHER, of the said district, has deposited in this office the title of a book, the right whereof he claims as author, in the words and figures following, to wit:

"The Prognostics and Crises of Hippocrates, translated from the Greek; with Critical and Explanatory Notes.

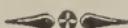
"Ταῦτα ποιῶντες, πρόνοιαν ἐπιτηδευεῖν.—HIPPOCRATES.

"By Henry William Ducachet, M. D Licentiate of the Medical Faculty of Maryland; Member of the New-York Historical Society; First Vice-President of the Medico-Chirurgical Society of New-York, &c. &c."

In conformity to the act of the Congress of the United States, entitled "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the time therein mentioned," and also an act, entitled "An act, supplementary to an act, entitled an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the time therein mentioned, and extending the benefits thereof to the arts of designing, engraving, and etching historical and other prints."

JAMES DILL,
Clerk of the Southern District of New-York.

P R E F A C E.



THE book of PROGNOSTICS is a collection of facts which long and attentive observation had furnished—a summary of remarks which experience had suggested. It contains no wild and fanciful reveries ; it is disfigured by none of that crude and conjectural physiology which appears in other parts of the writings of Hippocrates ; but describes, in a style plain and concise, yet beautiful and forcible, the simple appearances of nature herself. It is by far the most perfect of all his treatises ; and indeed is supposed by commentators to be the only one that received the finishing stroke from his masterly hand. It is unnecessary to expatiate on the value of this treatise, which has been pronounced “ the most surprising piece that ever the world has seen,”* and has been acknowledged to be “ a collection of the wisest and best Aphorisms, that ever were written by man.”†

* Clifton’s State of Physic, ancient and modern. Lond.
1732. p. 183.

† Idem.

It would be impossible to impress the reader with the full importance of these valuable maxims. But he may have some idea of their value, when he considers the great usefulness of the science of prognosis,* and is apprized that no other book contains aphorisms so true, and observations so minute, as are delivered in this astonishing treatise. Hippocrates directed the powers of his mind, and the labours of his whole life, particularly to this subject: and of so great importance did he consider it, that he has interspersed every part of his works with predictions, and has declared him the best physician, who is best versed in the doctrine of signs.

The book of CRISES, though under a different title, seems to be a continuation of the preceding treatise. Its subject is the same; and it may be considered as a *supplement* to the book of PROGNOSTICS. Many remarks contained in the latter are repeated in the former, as if to emphasize their importance. It is less perfect than the treatise on Prognostics, but not less valuable. We have therefore thought it not undeserving of a translation.

* "No part of medical knowledge is so serviceable in the practice of physic as prognostics."—Rotheram, note to Cullen's Practice.

In this cursory view of the character of these books, we have exposed the motives by which we have been induced to present this translation to the public: and we trust that in these will be observed a sufficient apology, if any be required, for the present undertaking.

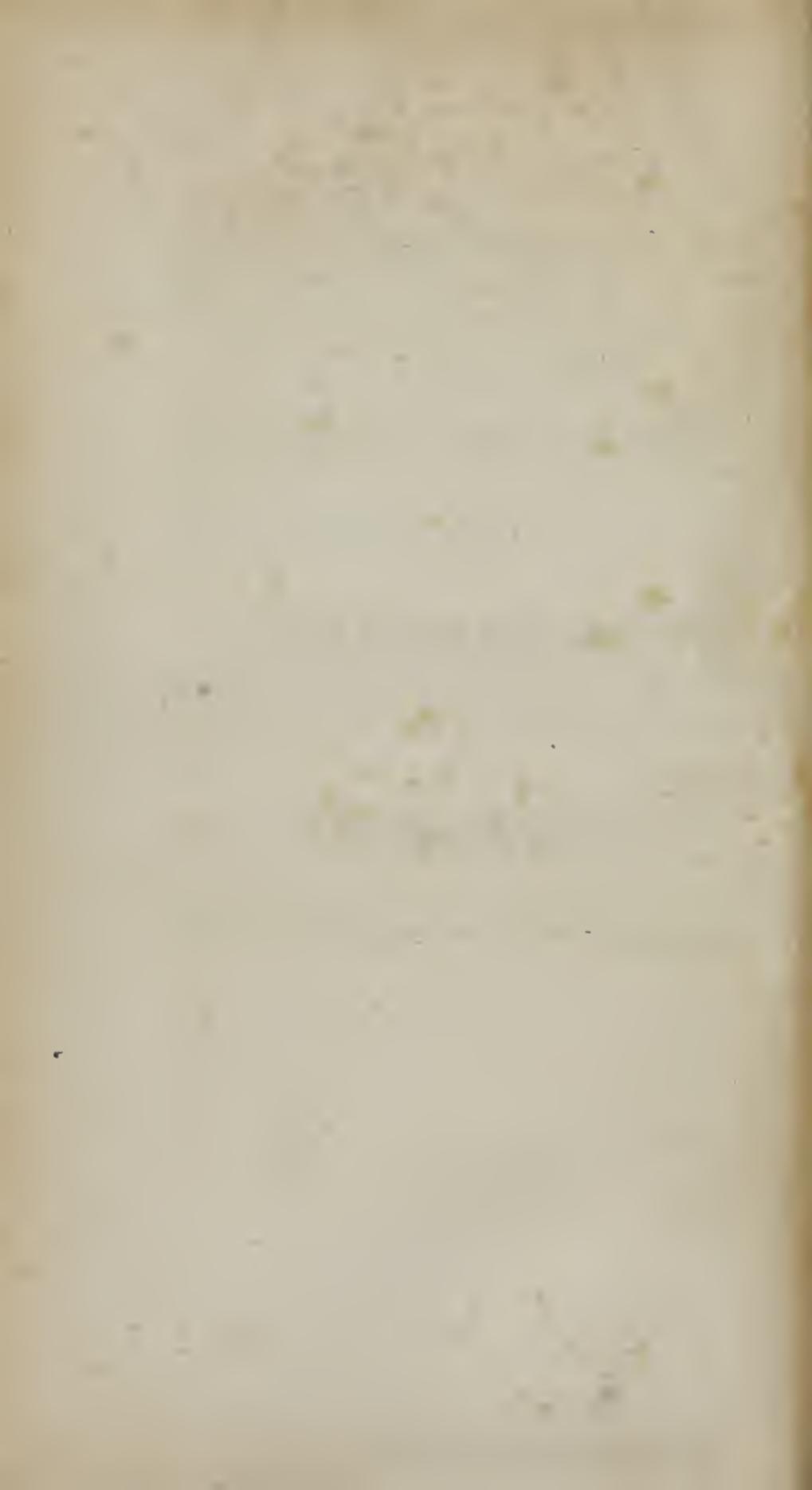
It remains to give some account of the following translation. We have endeavoured, as far as possible, to render the sense of the text in a literal translation. But, whenever an adherence to the letter of the original would render it obscure, or grossly inelegant, we have taken the liberty to depart from this obligation, and to preserve the meaning at the expense of the construction. We have frequently been constrained, for the elucidation of the passage, and the improvement of the sentence, to add words, and sometimes clauses. These we have designated by *Italics*, or enclosed in brackets, as circumstances required.

We have subjoined critical notes on some passages, with the view of removing their obscurity; and we have occasionally ventured to attempt explanations and illustrations of the doctrines and precepts delivered in the text. It may be thought that the Greek text, or a Latin version, would have been a useful addition. We at first intended to place the original on the opposite page: but this would have

greatly increased the expense of the volume, and would not have added proportionably to its usefulness. We have, therefore, preferred that its size be disproportionate to its worth, rather than that this be less than its bulk.

We submit our labours to the inspection of the public, confident that they cannot be wholly useless ; and hoping that the benefit and the pleasure they have afforded the translator, will be enjoyed by those who may honour them with a perusal.

THE
PROGNOSTICS
OF
HIPPOCRATES.



THE
P R O G N O S T I C S
OF
HIPPOCRATES.

SECTION I.

1. It seems to me that a physician should particularly study prognostics.
2. For he who perceives, and informs the sick of their present situation, of the symptoms that are past, and of those that are to come, and points out to them circumstances which they have overlooked, will necessarily be considered as well versed in the knowledge of diseases: so that men will confidently commit themselves to his care.

3. He who from present circumstances foresees future symptoms, will be best prepared to conduct the cure. To cure all the sick is impossible; this would be more desirable than to foretell results.

4. Some men, through the violence of the disease, die before the physician is called; others die immediately after he has been sent for; some live but one day; others a little longer, but *die* before the physician has been able by his art to combat the disease. However, it is useful to know how much the violence of such diseases exceeds the strength of the body, and at the same time whether there is any thing supernatural* in the disease, and what its prognosis may be.

* The word which we have translated supernatural, is *To θειον* in the text, and is rendered *divinum* in the latin versions. This word was applied by

5. For by this means he will justly be held in admiration, and be esteemed a good physician. He who for a long time before directs his attention to every symptom that may arise, will be best able to preserve those that may be restored; and he who foreknows and predicts the death, as well as the recovery *of his patients*, will exonerate himself from blame.

6. The first thing to be observed in acute diseases, is the countenance of the sick—whether it resemble that of persons

the Greeks to whatever eluded the cognizance of the senses, and was to them incomprehensible; supposing that it was the effect of the immediate agency of the Divinity. Many commentators, and among others Galen, suppose that in this place the author has reference to that peculiar condition of the atmosphere, from which result epidemical diseases, and from which they acquire their malignant character.

in health, and especially of the individual himself. It is best that it *should resemble the healthy countenance of the patient*; and that which differs most from this portends the greatest danger.*

* The countenance is so strikingly modified in expression by disease, that it is very properly selected as the first index of the state of the system. There are many diseases which may be almost immediately designated by an attentive observation of the countenance. The peculiar, suffused countenance of apoplexy, will frequently at first glance distinguish it from asphyxia, or stupor from other causes. The hysterick stupor is attended with no change in the colour or expression of the face, and thus furnishes a diagnostic circumstance which strikes the eye immediately.† The suffusion of the face in peripneumony, and its paleness and painful expression in pleurisy, are remarkable. The salowness and paleness of the countenance, consequent upon that derangement of the digestive organs which usually attends hæmatemesis, when con-

† Hall on Diagnosis.

7. Such as the nose becoming pointed, the eyes sunk, the temples hollow, the ears cold and shrivelled, its lobes turned up, the skin of the forehead hard, tense,

trasted with the florid countenance so generally observed in hæmoptysis, are almost sufficient to distinguish these affections. The bloated countenance which supervenes in organic diseases of the heart, is now ascertained to be an important pathognomonic symptom of these distressing affections; and an œdema of the nose and upper lip, is the only circumstance peculiar to worms. (Underwood, Dis. of Children, p. 81. Home's Clinical Experiments and Histories, p. 459. In both of which it is proved, that the usual symptoms of worms are frequently the result of foulness of the primæ viæ, and are generally attendant upon hydrocephalus.) But, as affording important data for *prognosis*, the aspect of the countenance is peculiarly deserving of notice. The author here considers a departure from the natural and healthy expression as indicative of great danger. It is very commonly observed that at the approach of death, and particularly in long protracted illnesses, the patient bears a strong resem-

and dry, and the colour of the whole face pale, black; livid, or of a leaden hue.*

8. If the countenance be such in the commencement of the disease, and you cannot yet judge from other appearances, it is necessary to ascertain whether the patient has been watching, whether he has had profuse diarrhoea, or has undergone long abstinence. If he refers it to any of these causes, there is less danger to be apprehended. This *unnatural* countenance, when the effect of any of these causes, disappears in the course of a day and a

blance to his parents, or some other relation, to whom in health he had no similitude. It is considered a dangerous symptom, because it indicates a great degree of emaciation; and shows that the vital energy is so far exhausted, as to be incapable of maintaining the natural expression.

* This is the **HIPPOCRATIC** countenance of authors; a name which it has obtained from this admirable description.

night (twenty-four hours.) But if it arises from none of these causes, and does not disappear in the time stated, you may predict that death is at hand.

9. If the disease is of longer standing than three or four days, and the countenance be such as *above described*, it is necessary to inquire concerning the circumstances which I have noticed before, and to examine all the symptoms, as they appear in the face in particular, and in the body *generally*.

10. The eyes are to be examined. If they shun the light, shed tears involuntary, or are distorted; if one is smaller than the other; if the albuginea is red, or covered with livid or black veins;* if sordes

* Agreeably to some versions, this passage should read thus: "If the eyelids are livid, or have upon them black veins," ἡ πελιὰ βλεφαροῦ, ἡ φλεβίσα μολανα
εν αυτέοισιν ἔχωσιν.

appears upon the cornea; if the eyes are turned upwards, with a tremulous motion, or are protruded, or greatly sunk; or if their neatness and brilliancy are lost; and the colour of the whole face is changed, all these are to be considered fatal presages.

11. It is necessary to examine the appearance of the eyes in sleep even. For when any of the white appears through the imperfect closure of the lids, and this does not arise from a diarrhoea, or from the operation of a purgative, and the patient is not in the habit of sleeping so, it is a bad and very fatal symptom.

12. If the eyelid, the lip, or the nose be distorted or wrinkled, livid or pale, and any other bad symptom be present, you may predict that death is near.

13. It is a fatal sign for the lips to be flabby, pendulous, cold and pale.

14. The physician should find the patient lying upon his right or his left side, with his neck, his arms, and his legs a little bent, and his whole body in an easy posture; for persons in health generally lie in this manner. That is the best position which most resembles that of persons in health.

15. A supine position, with the arms, the neck, and the legs extended, is less favourable.

16. But if the patient cannot maintain his situation, and is apt to slide to the foot of the bed, it is a most alarming sign.

17. When the feet are suffered to remain uncovered, without being very hot, and the arms, the neck, and the legs are

tossed about and naked, it is a bad sign; for it indicates great uneasiness.

18. It is a fatal sign to sleep with the mouth open, and upon the back, with the arms and legs much retracted, and thrown far apart from each other.

19. Lying upon the belly is indicative of delirium, or of pain in some part of the abdomen, if the person does not usually sleep in this position during health.*

* This apothegm is true to a certain extent ; it will apply to cases of *spasmodic* pains : but, in inflammations, the patient can endure no pressure ; so exquisite is the sensibility of the parts affected, that even the ordinary act of inspiration, by pressing down the diaphragm, becomes painful ; so that the patient breathes by the action of the thorax alone, and, to lessen the tension of the abdominal parietes, keeps his legs drawn up. Whereas in spasmodic

20. A desire to sit up, when the disease is at its height, is a bad symptom in all acute affections, but it is most so in pulmonary diseases.*

pains, he contrives every means to procure relief by pressure, and generally has recourse to that noticed in the text. There are some persons who, from a peculiar conformation of the chest, and others who, from habit, find it most convenient to lie in this posture ; in such, of course, no particular indication is furnished by that position, concerning the disease under which they may labour.

* *Orthopnæa*, or an inability of breathing in a recumbent posture, indicates, at all times, some great impediment to the function of respiration : but, in pulmonary diseases, it is peculiarly dangerous, because it is an evidence that the disease is very violent, and frequently is the first symptom which indicates the commencement of effusion. In organic affections of the heart, as aneurism, ossification, angina pectoris, &c. and in hydrothorax, this is a common, and usually a fatal symptom.

21. Grinding of the teeth in fevers, denotes delirium and death, in such as have not been in this habit from childhood. In all such cases you may predict danger. If the person is already delirious, it is a fatal symptom.

22. You must observe an ulcer, whether it come on before, or during the disease. When the patient is about to die, it will become livid and dry, or pale and dry before the event.

23. With regard to the motions of the arms, remark these things. In acute fevers, inflammations of the lungs or brain, and cephalalgias, if the hands are brought before the face, and are employed in catching at motes, in collecting straws, in picking at the clothes, and plucking pieces of chaff from the wall, all these actions are bad, and indicative of death.

24. Hurried breathing indicates pain, or inflammation in parts above the dia-phragm: but loud and slow respiration denotes delirium. But if the air expired, whether it be from the nostrils or the mouth, be cold, it is a very fatal symptom.

25. Easy breathing is greatly conducive to safety in all acute diseases attended with fever, and which come to their crisis within forty days.

26. Sweats which occur on critical days, and perfectly remove the fever, are very salutary in all acute diseases. They are also good when they arise from the whole body, and afford the sick relief: but if they do not produce this effect they are useless. The worst are cold sweats, which appear about the head, the face, and neck only; for, in acute fevers they forbode death, and in milder cases a prolongation of the disease; and those which

flow from the whole body, as well as those from the head alone, are also pernicious. Those sweats which are in drops like grains of millet, and which appear about the neck only, are pernicious: but those which distil by drops, and form a vapour, are salutary. With regard to sweats in general, it is to be remarked, that some are the result of weakness, and others arise from the violence of inflammation.

27. The *best condition* of the hypochondria consists in a total absence of pain, a softness and equality both on the right and on the left side. But if there is heat, or pain, or tension, or any other affection on either side, it is necessary to be careful.

28. If a pulsation is felt in the hypochondrium, it indicates great disorder of *the part*, and forbodes delirium. It is proper to examine the eyes of such as are

thus affected : for, if they roll about, you may expect delirium.*

29. A hard and painful tumour in the hypochondrium, is very bad, if it occupies the whole region; if it is confined to one side, it is least dangerous on the left.†

30. Tumours of this description, appearing at the commencement, show that death will take place shortly.

31. If in the course of twenty days,

* This pulsation is very common in derangements of the digestive organs, and in nervous diseases ; but is seldom observed in organic affections. It is seldom synchronous with the beat of the pulse.

† When on the left side a less important organ is diseased. It may be a collection of fæces and wind in the sigmoid flexure of the colon ; an affection which, of itself, is by no means dangerous.

neither the fever abate, nor the tumour subside, suppuration ensues.

32. In these cases, however, a bleeding from the nose may occur within the first period, and afford great relief. It is necessary to ascertain whether there be pain in the head, and whether the vision be indistinct; if so, there is a tendency to *haemorrhage*.

33. You must expect a bleeding chiefly in young persons, under thirty years of age; but in old persons, rather a suppuration.

34. Soft tumours that give no pain, and yield to the *pressure* of the fingers, cause longer crises, but are the least dangerous.

35. If in the course of sixty days neither the fever subside, nor the tumour disap-

pear, suppuration will take place; this applies also to tumours in other parts of the belly.

36. Thus, then, painful, hard, and large tumours, announce that, in a short time, there will be danger of death. But such as are soft, and not painful, and yield to the pressure of the finger, are generally of longer continuance, (*i. e.* in these the danger is not so immediate.)

37. Tumours in the epigastrium are less apt to form abscesses than those in the hypochondria; but those are least liable to suppuration that form below the umbilicus. But hæmorrhage is most to be expected in situations above the umbilicus.

38. However, all suppurations from tumours of long standing in these parts are to be seriously considered.

39. Abscesses hence arising are to be judged of thus: Those which tend outwardly are safest when small, when they have a great disposition *to make* outwardly, and verge to a point. But those are very bad which are large and broad, and have no tendency to point.

40. Those which break inwardly are best when they have no external communication, and are small, and without pain, and when the external parts retain their natural appearance.

41. The best pus is white, of an equal consistence, light, smooth, and without the least bad odour; that which is most different from this is the worst.*

* It cannot be improper or useless, to subjoin, for the use of the student, a note on the distinctive properties of pus, and the tests by which it may

be known. Those to whom these marks are familiar, will know how to appreciate the value of this information to those who are ignorant of them. The properties of pus are as follows: Its consistence is about that of cream; its colour is whitish; its taste is said to be mawkish; it is inodorous when cold, when warm it has a peculiar smell. Examined through the microscope, it is seen to be composed of semi-opaque globules and a transparent lymph, in the proportion of about six parts of the latter to one of the former; it does not putrefy readily, though by exposure to the air it acquires an acrid property. The following are its most conclusive tests: It may be evaporated to dryness without coagulation; it cannot be diffused in cold water without difficulty, but may be very readily in warm water; in which last it remains diffused on becoming cold; it is coagulated by the muriate of ammonia; and will be precipitated from its solution in sulphuric acid, or in caustic lixivium of potass by the addition of distilled or spring water. To this we may add a very simple yet conclusive test, which may be relied on as confidently as the experiment with the microscope: Put a small quantity of pus between two pieces of clear glass, and on holding them before a candle, distinct globules will be seen. Great reliance is placed by some on the test derived from its specific

gravity. The fallacy and uncertainty of this experiment is shown by the fact, that pus by being mixed with a few globules of air (which it is apt to be in those very cases in which it is of most importance to distinguish it) will float in water; and that mucus, with which it is most apt to be confounded, will frequently sink, when its thinner parts have evaporated. It may also be added, that healthy pus is readily wiped from the surface that secreted it, whereas ill-conditioned discharges are tenacious and adhesive. These last, and indeed all mucilaginous animal secretions, are discovered by the microscope to be flaky.

THE
P R O G N O S T I C S
OF
HIPPOCRATES.

SECTION II.

1. DROPSIES resulting from acute diseases are always bad; for they do not resolve the fever, they excite great pain, and are fatal. They commence for the most part in the flanks and loins; sometimes however from the liver.

2. Those in whom dropsies commence in the flanks and loins have swollen feet, and obstinate diarrhoeas, which neither

remove the pains of the flanks and loins, nor soften the belly.*

3. In those in whom dropsies arise from the liver there is a desire to cough, but no expectoration; their feet swell, their excrements are hard and voided with difficulty, and they have tumours about the abdomen, sometimes on the right, some-

* By those dropsies which commence in the flanks and loins, the author doubtless means such as are the result of the debility induced by long-continued diseases. Of this debility pains in the flanks and loins are almost constant attendants; and diarrhoea is a very frequent concomitant. The diarrhoea does not remove the pains, or soften the belly; but on the contrary by increasing the debility of the body generally, necessarily aggravates these symptoms. The last stage of phthisis pulmonalis, in which the patient is frequently racked with pain, and wasted by an uncontrollable colliquative diarrhoea, and in which the bulk of his body increases as his strength decays, furnishes an apt illustration of this apothegm.

times on the left side, which sometimes are permanent, and sometimes disperse.*

* Without doubt the author here refers to those dropsies which so frequently follow inflammations of that viscus. It is remarkable that all such affections of the liver are attended with cough: accordingly, Dr. Cullen notices a cough as one of the characteristics of hepatitis; and from this circumstance, the disease is sometimes confounded with pneumonia. Dissections have shown that cough attends, when only the upper or convex part of the liver is affected, and the diaphragm and lungs are necessarily involved in the inflammation. The diagnostic usually laid down for the discrimination of the two diseases, is that in hepatitis the cough is dry, whereas expectoration attends the cough in pneumonia. This remark is calculated to mislead; the cough in the first stage of pleurisy also is dry, and hence by this circumstance alone cannot be distinguished from the cough of hepatitis. The only diagnosis derived from the cough by which the hepatic affection can be distinguished from pneumonia is, that in the former it supervenes in about forty-eight hours; whereas, in the latter, it is one of the first symptoms. The œde-

4. When the head, the arms, and the feet are cold, at the same time that the belly and the breast are hot, it is a bad sign.

5. It is best that all the body be of an equal temperature and moisture.

6. The patient ought to be able to turn about easily, and be alert in raising himself. If his hands and feet, or the rest of his body be torpid, it is a very dangerous state.

7. If besides this torpidity of the body the nails and fingers become livid, death is very soon to be expected.

ma is the consequence of the interruption to the return of blood from the lower parts ; and the costiveness is the result of a diminution or suspension of the biliary secretion.

8. A total blackness of the fingers and feet is less dangerous than lividity. But other symptoms are to be considered. For if the patient seems to bear it well, or some other favourable symptom occur, you *have reason* to hope that a suppuration will take place, by which his life will be preserved, and the black *or mortified* parts cast off.

9. A retraction of the testicles and pudenda indicates great pain, and *forebodes* death.

10. With regard to sleep: agreeably to the order of nature the patient should remain awake during the day, and sleep at night. When this order is reversed, it is unfavourable. The patient is not at all injured by sleeping from daylight to the

third part of the day. But sleeping after this time is injurious.*

11. It is very bad to sleep neither night nor day; for this wakefulness is occasioned by pain or uneasiness, and will be followed by delirium.

12. It is best that the alvine dejections be soft, and of a proper consistence; that they occur at the same time that evacuations usually take place in health; and that they be proportionate to the quantity of ingesta. Such evacuations show that the bowels are in a healthy state.

13. But if the excrements be liquid, it

* If the patient is so insensible to external impressions as to sleep during the day, or so exquisitely sensitive as to remain awake at night, he is certainly in a dangerous state.

is well that they be evacuated without noise, and that they be neither too frequent nor too copious. For the patient being exhausted by frequently going to stool, will be troubled with wakefulness. If the evacuations are copious and frequent, there is danger of fainting.

14. It is necessary to go to stool once, twice, or three times during the day, according to the quantity of ingesta; once in the night, and more towards morning, according as the custom of the sick may be.

15. The dejections ought to become thicker as the disease approaches its crisis. They should be yellowish, and not very offensive.

16. It is a good sign for round worms to be voided with the excrements, when the disease is tending to a crisis.

17. The belly ought, in all diseases, to be soft, and of its natural size.
18. If the excrements are very liquid, or white, or green, or very red, or frothy, all these are bad *appearances*.
19. They are also bad when small, viscid, white, greenish, and thin.
20. But the most fatal are such as are black, fatty, livid, or of the colour of rust, and at the same time fœtid.
21. Dejections of a mixed nature, although not so speedily mortal, are not less fatal. Of this nature are such as resemble the scrapings of *guts*, such as are biliary, bloody, porraceous, and black, which are sometimes mixed together, and sometimes separate.
22. It is best that wind should escape

without noise, or crepitation. But it is better that it should escape with noise than be retained. However, if it escape with sound, unless the patient prefers to emit it so, it is a sign that he is in pain or delirious.

23. Pains and tumours of the hypochondria, which are recent and without inflammation, are resolved by borborygmi in that region; and especially if attended by discharges of faeces, urine, and wind; even when these do not take place, the borborygmi alone will afford relief, particularly if they descend to the lower part of the belly.

24. That urine is best which deposits a white, smooth, and equal sediment, throughout the whole course of the disease to its crisis: it is a sign that there is no danger, and that the disease will be short. But should there be any irre-

gularity, the urine being sometimes without sediment, and sometimes yielding a white and smooth deposite, the disease will be of longer duration and less safe.*

25. If the urine is reddish, and its sediment also of the same colour and smooth, it is an indication that the disease will be of still longer continuance, but without danger.

26. Urinary sediments are bad which resemble coarse flour; worse if they re-

* The original words *λεῖος* and *ἴμαλός*, which we have rendered *smooth* and *equal*, are so nearly synonymous, that it is difficult to mark the difference between them in an English translation. The sense of the word *λεῖος* is given in the Lexicons as *lævis*, non *asper*, *planus*; and *ἴμαλός* is rendered *planus*, *similis*, *æquabilis*, so that the former word seems to be applied to equality of surface, and the latter to equality of composition, or homogeneity.

semble small scales:/* such as are white but very fine, are very bad; and such as are branny are even worse than these.

27. White clouds suspended in the urine are good; such as are black are bad.

28. As long as the urine is reddish and thin, it shows that the disease is not yet concocted.

29. If the disease continue long, and this kind of urine remain, there is danger that the patient will not survive until the urine be concocted.

30. The worst kinds of urine are such

* The latin versions generally render this word (*πετελωδίες*) *quasi folia*; but *πετελων* signifies *lamina* also.

as are fœtid and watery, and black and thick.

31. In men and women black urine is the worst; but in boys, that which is watery.

32. When the urine continues thin and crude* for a long time, and the other symptoms are favourable, you may expect an abscess in the parts below the diaphragm.

33. Oil, floating on the surface of the urine, and resembling cobwebs,† is to be condemned, for it is a sign of colliquation.

* *Crudity*, in the language of the ancient physicians, is used in contradistinction to concoction, a term applied to that process, by which they supposed the morbid matter was rendered fit to be separated from the healthy fluids.

† Oil floating on the surface of water forms various

34. It is proper to examine the cloudiness of the urine, to observe whether it rises or sinks, and of what colour it is. That which precipitates, having the colours aforesaid, is to be considered good and laudable; but that which rises is bad.

35. But take care that you be not deceived; for, if the bladder is diseased, it may yield urine of this description: in this case the sign does not apply to the system generally, but merely to the bladder.*

figures like network: the same appearance is observed in urine which has stood a sufficient time for the separation of its oleaginous parts. The author, doubtless, has reference to the same appearance in the word *ἀραχνοειδῆς*, like cobwebs.

* A calculus, or a morbid irritability of the mucous membrane of the bladder, generally known by the term *catarrhus vesicæ*, may very much influence the appearance of the urine.

36. The vomiting of bilious and puitous matter is exceedingly useful, provided it is neither too thick nor too abundant. The vomiting of unmixed matter is injurious.

37. If the matter vomited be porraceous, or livid, or black, of whichever of these colours it may be, it is to be considered bad.

38. If the same person vomits of all these colours, it is a very fatal symptom.

39. But the livid vomiting, if of an offensive odour, denotes very speedy death.

40. And all putrid and offensive smells, in all *cases* of vomiting, are bad.

41. In all affections of the lungs and pleura the expectoration ought to come on

speedily and easily, and to be of a well-mixed yellow colour.

42. For if a yellow, or reddish expectoration come on a long time after the commencement of the disease, or be attended with much cough, or be not well mixed, it is bad.

43. A yellow, unmixed expectoration, is dangerous; when white, viscid, and round, it is useless.

44. It is very bad when green and frothy; and when so imperfectly mixed as to appear black it is worst of all.

45. It is also bad if nothing is expectorated; if the lungs do not throw off the excreted matter; but from its accumulation in the throat a rattling is produced.*

* This rattling is an invariably fatal symptom, un-

46. The coryza and sneezing which precede, or supervene diseases of the lungs and of the pleura, are always bad. But in other dangerous diseases, sneezing is rather beneficial.*

47. In inflammations of the lungs, if the expectoration is yellow and a little tinged with blood in the beginning of the disease, it is salutary, and gives great relief. But if it last until the seventh day, or longer, it is not so safe.

less when attendant on the advanced stage of croup. It here indicates a detachment of the membrane, and is consequently favourable.

* Sneezing has been observed to be a symptom of convalescence : hence the French complimentary benediction—" Dieu vous bénisse." So far as sneezing indicates a return of the natural sensibility of the organ, the remark is consistent with experience.

48. All expectoration is bad which does not relieve the pain; that which is black is the worst, as has before been stated, (No. 44.) That is best of all which gives relief.

49. Diseases of these parts, which are relieved neither by expectoration, by alvine discharges, by blood-letting, by purgatives, nor by diet, will run into suppuration.*

50. Those suppurations are very dangerous, which come on whilst the expectoration is yet bilious, whether the bilious

* If the disease continue obstinate for seven days a suppuration may generally be expected. It is however impossible to establish any invariable rule on this subject, for it not unfrequently happens that an inflammation of the lungs will continue unabated for three or four weeks, and notwithstanding terminate in resolution.

matter be alone, or mixed with pus: and, especially, if the suppuration has come on with this expectoration, after the disease has attained seven days. Unless some favourable *change* occur, there is reason to fear that death will happen on the fourteenth day.

51. Among the favourable symptoms may be enumerated, bearing the disease well, easy respiration, absence of pain, the expectorated matter being easily thrown up by coughing, an equal warmth and moisture over the whole body, absence of thirst; the urine, the alvine discharges, the sleep, and the perspiration, if such as described above, are to be considered good. If all these appear thus, the patient will not die. If some, but only a few of these symptoms appear, the patient will not live beyond the fourteenth day.

52. Such as are contrary to these are bad *symptoms*, viz. the disease being badly sustained, laborious and quick respiration, continuance of pain, difficult expectoration, great thirst, unequal warmth, (the body being of different temperatures in different parts,) great heat of the belly and præcordia, and coldness of the forehead, hands and feet; the urine, the dejections, the sleep, and the perspiration being different from the descriptions above, and consequently bad. If any of these symptoms should supervene during this *bilious* expectoration, the patient will die before the fourteenth day, either on the ninth or the eleventh. In these cases then you may venture to pronounce that the expectoration will be fatal, and that death will occur before the fourteenth day. In short, it is by comparing the bad and the favourable symptoms that a prognosis is to be obtained. In this way any one may be able to ascertain the truth.

53. Some abscesses break for the most part on the twentieth day, but sometimes on the thirtieth or fortieth; others again continue until the sixtieth.

54. You may know the commencement of a suppuration from the very day that the patient first has the *secondary* fever, or is seized with chills; and if instead of a pain he has a sense of weight in the diseased part; for these usually occur at the commencement of suppuration. From this time you are to expect the breaking of the abscess within the aforesaid periods.

55. To *ascertain* on which side an abscess may be, it is necessary to make the patient turn *from side to side*, and to notice on which he feels pain and most heat; when he lies upon the sound side he will have a sense of weight from above. The abscess is upon that side in which he experiences this weight.

56. All abscesses may be distinguished by these signs. First, if the fever does not intermit, but is slight during the day and high at night, and is attended with profuse sweats. There is a disposition to cough, but nothing considerable is expectorated; the eyes become hollow, the cheeks red, the nails curved; the fingers, particularly at their extremities, are hot; the feet swell, the appetite is destroyed, and pustules* break out upon the body.†

* *Pustules, &c.* Van Swieten notices pustules upon the body in the advanced stage of phthisis. He ascribes them to the clogging of the cuticular vessels in consequence of the thickness and tenacity of the blood from colliquative sweating.—*Comment. Aph.* 377. They are more properly ascribable to the copious and clammy sweats which take place. Perhaps the atony of the skin, or that degree of vitiation of the fluids which always attends a hectic, will account for their appearance. Or they may be the result of that intimate intercommunion between the bowels and the skin, which disposes the latter to eruptions whenever the former are affected.

† This is a most admirable description. It could

57. All abscesses of long standing are attended with these signs, in which confidence may be placed. But such as are recent, manifest themselves by the symptoms which *we have noticed*, as occurring in the commencement of suppuration, and by a greater difficulty of breathing.

58. It may be known whether an abscess will break early or late by the following signs. If in the commencement there is pain, and the difficulty of breath-

not be improved by the most accurate nosologist. The omission of the state of the pulse may be considered by some as a deficiency ; but this accurate observer had no doubt ascertained its irregularity and uncertainty at this period of the disease. It may be remarked, that generally the pulse becomes softer, fuller, and more frequent than in the first stage ; and has a peculiar quickness, characteristic of the irritability that now exists.

ing, the cough and the expectoration continue, you may expect it to break on the twentieth day, or even sooner. But if the pain is more moderate, and the other symptoms are proportionably milder, it will break at a later period. But pain, dyspnœa, and expectoration necessarily occur before the rupture of the abscess.

59. Those will most probably survive in whom the fever subsides the same day that the abscess breaks, who soon recover their appetite, and are freed from thirst; whose alvine evacuations are small and well concocted; and who expectorate a white, smooth, and equal* pus, unmixed with mucus, and without pain or violent coughing. If it goes on thus it is well, and

* ὁμόχρωον, equal in colour.

the patient soon recovers; but if not, the nearer the symptoms approach to these, the sooner the cure will be effected.

60. Those will die, in whom the fever does not cease, but when it seems to abate returns with increased heat; who are troubled with great thirst, and have no appetite; whose evacuations are liquid; and who expectorate a greenish, blue, pituitous, or frothy matter. If all these appearances take place death will occur.

61. Of those in whom some only of these symptoms are observed, some die, and others live a long time. But in these cases, as in all others, a prognosis is to be drawn from all the symptoms.

62. In those *cases* of pulmonary disease in which abscesses form about the ears,

or break out in the lower parts, and form fistulæ, the patients will recover.*

* A very remarkable case, confirming the truth of this remark, lately occurred to my observation. A patient labouring under a severe pneumonic attack, which had resisted the usual means, was suddenly relieved of his symptoms by an inflammation of the scrotum. This inflammation was so violent, that mortification ensued; and the testicles were completely denuded by the sloughing of the scrotum. The sphacelation was arrested by a blister around the parts; the skin was gradually reproduced; and the patient is perfectly restored, and has suffered no return of the pneumonic affection.† It would be interesting to inquire whether former disease of these parts had predisposed them to this translation; and whether in other instances of metastasis, the secondary affection be in any way connected with such predisposition, or be the result of some peculiar sympathy with the seat of the original disease. The

† The particulars of this interesting case were kindly furnished by my friend Dr. Townsend, of this city, in whose practice it occurred.

63. In regard to this subject these things are to be observed. If the fever continues, the pain remains unabated, and the expectoration is not good; if the alvine discharges are not bilious, nor well

term *metastasis*, I am aware, is unfashionable, and consequently unpopular at the present day, when the doctrine of the translation of morbid *matter* is discarded as absurd. Without intending to revive a dogma so justly exploded, it is conceived that a transfer of morbid *action* may be admitted with certain limitations; and that the etymology of the term *metastasis* justifies its application to this pathological phenomenon. Thus, in mumps, we see the disease suddenly disappear, and fix itself upon the testicles or mammae. Assalini observes, that it is no uncommon occurrence for ophthalmia to supervene on the sudden cessation of a diarrhoea; and Dr. Dewar notices its remarkable alternation with bowel complaints. The connexion between rheumatism and bowel affections is so remarkable and so frequent, that Dr. Akenside was led to declare that dysentery was nothing more than *rheumatism of the intestines*.

formed, nor well concocted; if the urine is neither very abundant nor very thick, and does not deposite a copious sediment, and yet all the other symptoms are favourable, and indicate recovery, you may expect these metastases, (or abscesses of this kind.)

64. Abscesses occur in the lower extremities when there has been inflammation about the hypochondria; but form in the superior parts when there has been neither hardness nor pain in the hypochondrium, and when the difficulty of breathing, after continuing for some time, ceases without any evident cause.

65. Depositions and abscesses in the legs are always salutary in violent and dangerous inflammations of the lungs. They are most so when they happen at the time that the expectoration is undergoing a change. For if the tumour and

pain come on when the expectoration has changed from a yellow matter into pus, and is easily brought up, the patient will be perfectly safe, and the abscess will very shortly disappear without any pain. But if he does not expectorate a proper matter, and his urine does not yield a good sediment, there is danger of the joints being injured, and giving the *patient* a great deal of trouble.

66. If these abscesses disappear, (i. e. of the legs,) and no expectoration takes place, and the fever still continues, it is a terrible case; for the patient is in danger of delirium and death.

67. Suppurations resulting from diseases of the lungs are most fatal in old age; but those produced by other causes are most so in youth.

68. Those pains of the loins and inferior

extremities which are attended with fever are very dangerous, when leaving the lower parts they ascend to the diaphragm. It is therefore necessary to examine the other symptoms, for, if any bad sign appears, the situation of the patient is hopeless.

69. But if, when the disease is thus translated to the diaphragm, no other unfavourable symptom appears, there is great reason to hope that suppuration will ensue.

70. If when abscesses are opened by the cautery, the pus *discharged* is pure, white, and inodorous, the patient will be preserved. But if it be sanguous and muddy he will die.

71. When the bladder is hard and painful it is a most dreadful and fatal case. It is the more so if accompanied by a

continual fever: for pains alone of the bladder are sufficient to produce death. The bowels in these cases void nothing unless it be very hard, and with great difficulty.

72. Purulent urine, with a white and equal sediment, resolves the disease.

73. But if no urine is voided, if the pain is not alleviated, if the bladder does not become softer, and the fever continues, there is reason to fear that the patient will die within the first periods of the disease.

74. This event is especially apt to occur in young persons between seven and fifteen years of age.

THE
P R O G N O S T I C S
OF
HIPPOCRATES.

SECTION III.

1. FEVERS come to a crisis on the same days on which it is observed that the sick generally recover or die.
2. The mildest fevers, and such as have the most favourable symptoms, cease on the fourth day, or sooner; such as are very malignant, and in which very dangerous symptoms appear, are fatal on the fourth day, and sometimes before.

3. Thus ends the first period of fevers; the second extends to the seventh day, the third to the eleventh, the fourth to the fourteenth, the fifth to the seventeenth, the sixth to the twentieth. Thus then the crises of acute diseases take place within the twentieth day after their accession, and by periods of *about* four days.*

* It is not to be imagined that Hippocrates laid these down as fixed and invariable rules for the crises of diseases. He observed nature too accurately to believe her subject to any such determinate periods. He laid these down as the usual periods at which diseases terminate; and by an apparent but slight contradiction, which could not have been the effect of inadvertence, seems to have intended to be so understood. He here mentions the 20th day as critical: he frequently elsewhere fixes the critical term at the 21st. This is an evidence that he intended to convey the idea that the crises occurred *about* those periods. We have accordingly translated it so. Our observation is justified further by the remark contained in the succeeding aphorism,

4. But these periods cannot be laid down exactly by whole days: for even the

and which will be explained by a reference to the Greek calendar.

It has been denied by some that there is a tendency in diseases to terminate at particular periods. It requires a long course of experience, and very attentive observation, to decide this point. Perhaps it would not be of much practical importance were it determined. It might indeed prevent us from interfering with nature's operations, and teach us when to concur with her efforts; but it would affect our treatment, so far only as by leading us to observe nature more carefully, it would enable us to prescribe more judiciously. The efforts of nature, however regular, could seldom accomplish cures so completely and so speedily as they are effected by the vigorous practice of the present day. For a full exposition and defence of the doctrine of critical days, see Cullen's First Lines of Practice, vol. I. sect. 107. Wilson on Fevers, vol. I. p. 68, and Parr's Medical Dictionary vol. I. art. *Crisis*.

year itself, and the months, are not exactly divided into complete days.

5. After these in order, *in diseases* of the same character, the first period is *included* in thirty-four days, the second in forty, the third in sixty,

6. In the commencement of these diseases it is very difficult to ascertain *a priori* in what space of time they will come to a crisis, for they commence very much in the same manner. But it is necessary to observe carefully from the first day, and to remark the changes of every fourth day; and thus may the *probable* termination be ascertained.

7. The course of quartans observes the same order.

8. But it is easier to foreknow *the crises* of diseases which are to terminate in a

short time, because from the beginning they differ very much. Those will survive who breathe easily, have no pain, sleep at night, and have all the symptoms favourable. But those will die who breathe with difficulty, are delirious and wakeful, and exhibit other bad symptoms.

9. Such being the case, the prognosis of diseases that are verging to a crisis is to be deduced from their duration and the manner of their accessions.*

* The critical days were also called *judicial*, or *indicating* days, as affording a judgment concerning what might be expected at the next critical term. Thus, if an amelioration take place on a critical day, there is reason to expect a more perfect abatement of the symptoms at the next critical period. Or if an unfavourable change occur on a critical day, the next term will bring with it still more dangerous symptoms. Hence it is that Hippocrates recommends in the 6th Aphorism "to observe carefully

10. In the same manner are the crises of puerperal diseases to be ascertained, calculating from the labour.

11. Violent and continual pains of the head, with fever, if accompanied by any dangerous symptoms, are usually fatal. But if the pain continue twenty days, without any bad sign, and the fever still remain, you may expect a hæmorrhage from the nose, or an abscess in the lower extremities. If the pain is recent you may expect a bleeding from the nose, or an abscess; and especially if the pain is seated about the temples and forehead.

12. Hæmorrhage is to be expected

from the first day, and to remark the changes of *every fourth day*," or of every new period ; and hence the direction in this Aphorism, to attend to " the manner of their *accessions*," or to the symptoms which attend every new term.

chiefly in young persons, under thirty-five years of age; suppuration rather in old persons.

13. An acute pain of the ear, with violent and continual fever, is terrible; there is danger of delirium, and of death. As this case is very dangerous, it is necessary to be very careful in observing the symptoms from the very first day.*

14. Young persons die of this disease on the seventh day, and even earlier; but old persons much later. For fever and delirium are less apt to occur in old persons, and hence suppuration rather takes place.

* *Otitis* is so apt to involve the brain in inflammation, that the cerebral affection is made an important circumstance of its definition in the system of almost every nosologist.

15. Relapses are most fatal at this time of life; young persons die before suppuration comes on. But if a white pus runs from the ear, there is a hope that they will live, especially if any other favourable symptom appears.

16. Ulcers of the fauces, with fever, are bad. And if any other symptom appears which we have before declared to be bad, you may predict that the patient is in danger.

17. Those anginas are very dangerous, and speedily fatal, which produce no sensible change in the fauces or in the throat, which cause great pain, and induce orthopnœa. They produce suffocation on the first, second, third, or fourth day.

18. Those also which in like manner cause pain, but do excite tumour and redness in the fauces, are very fatal; but,

when the redness is very great, they are not so immediately dangerous as the preceding.

19. The disease continues longer when the redness is not confined to the fauces merely, but extends to the neck also; in this case the *patient* is more apt to recover if the neck and the breast are involved in the redness, and the erysipelas does not extend inwardly.

20. If the erysipelas does not disappear on the critical days, and the tumour does not extend outwardly, if no pus is coughed up, and the patient is easy, and without pain, death is at hand; or it shows a recurrence of the inflammation.

21. It is safer for the redness and tumour to extend outwardly very soon; because, if they extend to the lungs, delirium

ensues, and empyema is generally produced.

22. It is dangerous to cut off, to scarify, or to cauterize the uvula when it is red and tumified; for inflammation and hæmorrhage may ensue. It is therefore proper at this time to effect the cure by other means. But when the uvula is separated *as it were*, forming what we call *σταφυλη*,* (*the grape,*) and the extremity of the uvula is enlarged and rounded, but its upper part is attenuated; it is then safe to perform the operation. It is proper to perform the operation after opening the bowels, if time permits, and the patient is not threatened with suffocation.

* Σταφυλη uvam significat, proprieque dicitur gargaronis aut columellæ affectus cum ex fluxione laxior est reddit, et suprema sui parte tenuis, inferiore vero crassior, et livida. Fœsius, *Œconomia Hippocratis*, p. 351.

23. When fevers cease without evident signs of the disease being resolved, and on days which are not critical, you may expect a relapse.

24. In long-continued fever, in which the symptoms have been favourable, and there is pain without inflammation or any other evident cause, you are to expect abscesses, and painful swellings about some of the joints, and particularly in the lower extremities.

25. These abscesses form more especially, and in a short time, in persons under thirty years of age.

26. You are immediately to expect an abscess, as soon as the fever has extended beyond the twentieth day.

27. *Abscesses* are not apt to form in old

persons, even though the fever continue longer.

28. An abscess of this kind may be expected when the fever has been continued. But if it intermit, and be erratic in its character, and thus be protracted until autumn, it will be changed into a quartan.

29. As abscesses form in those who are under thirty years of age, so quartans attack those principally who are of this age, and upwards.

30. It is well to know that abscesses are most apt to form, and continue longest in winter, but are then least apt to turn inwards.

31. He who, in a fever not of a mortal character, complains of pain in the head, cloudiness of vision, and cardialgia, will

have bilious vomiting. When rigor accompanies *these symptoms*, and the lower part of the hypochondrium is cold, the vomiting will come on sooner. If at this time the patient drink or eat any thing, he will vomit very soon.

32. Those in whom this pain of *the head* commences on the first day, suffer greatly on the fourth and fifth, and die on the seventh. For the most part, however, the pain commences on the third day, and is most distressing on the fifth ; in such cases the patients die on the ninth or eleventh day. But if the pain begins on the fifth day, and the other *symptoms* come on in *correspondent* order, the disease will terminate on the fourteenth day.

33. These *rules* hold good both in men and women ; and particularly in fevers of a tertian type : they apply too to young

persons, but particularly in continued fevers, and regular tertians.

34. When in fever of this kind, headache occurs, and instead of a cloudiness there is dulness of sight, and an appearance of sparkling in the eyes; and, instead of cardialgia, there is a tension of the right or left hypochondrium, without pain or inflammation, instead of vomiting you may expect a haemorrhage from the nose. But even in this case you are to expect a haemorrhage in young persons rather than in those who are about thirty years of age, or upwards; in such you may expect vomiting.

35. Convulsions happen in children if the fever is acute, and the belly constipated, if they are wakeful, easily frightened, and scream out; if they change colour, and become pale, livid, or red *in the face*. They are induced very easily in new-

born infants, and until the seventh year. But older children, and adults, are not seized with convulsions in fevers, unless some very violent and dangerous symptoms appear, such, *for instance*, as indicate phrenitis.

36. You may predict the death and recovery of children, as well as of others, from the signs which have been individually laid down.

37. I speak here of acute diseases, and of such as result from them.

38. He who is desirous of being able to predict with certainty the recovery or death of *the sick*, and how many days a disease will continue, or in how many it will cease, must understand the whole doctrine of signs, so as to be able to judge of all the symptoms, and to compare their relative importance, according to *the rules*

which have been laid down with regard to the urine and sputa; but he will especially notice what has been said concerning the pus and the bile which are coughed up.

49. He must also carefully advert to the character of prevalent diseases; and be well versed in the constitution of the seasons.

40. But as it respects symptoms, and all other signs, he must know and remember, that in every year, and in every season, bad symptoms presage danger, but good symptoms are favourable.

41. For the foregoing signs are true in Lybia, and in Delos, and in Scythia.*

* Some commentators suppose that, by a kind of synecdoche, the author intended to designate the

42. And it is not difficult for any one who has learnt how to discern and compare them, to verify the greater part of them in these regions.

43. You must not require the name of any disease, which has not been particularized here. You may know by the same signs all those which terminate within the periods laid down above.

three parts of the world, Africa, Asia, and Europe. We do not perceive the necessity of this conjecture to establish the universal applicability of the doctrine of signs : this is already declared by the author in the preceding aphorism. When we remember that the climate of Lybia was exceedingly hot, whilst that of Scythia was the reverse, and that Delos presented an instance of a medium between these extremes, it cannot be doubted that these places were adduced as examples of the truth there laid down..

END OF THE PROGNOSTICS.



T H E C R I S E S

OF

HIPPOCRATES.

T H E C R I S E S
OF
HIPPOCRATES.

1. THE signs of an approaching favourable crisis are the same as those of health.
2. Those sweats are best, and most effectually remove the fever, which occur on the critical days, and completely relieve the febrile *symptoms*. Those also are to be considered salutary which arise from the whole body, and afford relief. Those which give no relief are useless.
3. As the disease approaches its crisis, the dejections should become thicker;

they should be yellowish, and not offensive. It is good for round worms to be discharged towards the crisis.

4. The best urine is that which deposits a white, smooth, and equal sediment throughout the whole course of the disease. It shows that the disease will be without danger, and of short continuance.

5. If the disease is relieved by the coming on of a sweat, and the urine appears reddish, and has a white sediment, the fever will return the same day, and will terminate safely in five days.

6. Those who are about to recover shortly, will exhibit the most favourable symptoms. They are without pain, and dangerous *symptoms*; they sleep at night, and have the other symptoms of convalescence.

7. In those who, in a fever not of a mortal nature, suffer pain in the head, and other *such* symptoms, the bile predominates. Those who are distressed with pain in the first days of *the complaint*, and suffer more on the fourth and fifth days, will be freed from the fever on the seventh.

8. The crises of fevers take place on the same days on which the sick recover, or die. The mildest fevers, and such as have the least dangerous symptoms, terminate on the fourth day, or before. But the most fatal, and such as exhibit the most dangerous appearances, prove fatal on or before the fourth day. The first period then ends thus, the second extends to the seventh day, the third to the eleventh, the fourth to the fourteenth, the fifth to the seventeenth, and the sixth to the twentieth. Thus then the periods of acute diseases are composed of terms of

four days, and extend to the twentieth day.* But they cannot be calculated precisely by days; for even the years and the months are not exactly made up of days.

9. In ardent fevers the symptoms are favourable, if such as appear in health.

10. *Fæces* which have little consistence indicate recovery in three days; such as are thicker designate it for the next day: and such as are of a proper consistence for the same day on which they appear.

* The celebrated de Haen, to test the doctrine of critical days, collected and compared all the cases which are related in the writings of Hippocrates. He found that of 163 fevers, 107, or two thirds of the whole number, terminated on the days laid down as critical. So remarkable a correspondence is greatly corroborative of the doctrine.

11. If a jaundice appear on or after the seventh day of ardent fevers, it is a sign of sweating. These diseases have no tendency to sweating, or any other excretion,* but they are cured *thus*. When the heat abates, and a moisture succeeds, the fever must necessarily be terminated; and discharges of urine or faeces ensue; or a haemorrhage from the nose, or a copious

* The word which we here render *excretion* is ἀφίσασθαι, literally signifying to form an *abscess*. It is accordingly represented in the Latin versions by *abscessum facere*. The following quotation from Van Swieten's Commentaries will explain the meaning of the text, and at the same time justify our translation: “ *Abscessus nomine vocabatur illud naturæ humanæ molimen, per quod ex sanguine separabantur quædam nocitura, quæ evacuabantur de corpore, vel deponebantur ad quædam loca; ideoque distinxerunt veteres bifariam hos abscessus, nempe in illos, qui per effluxum, et alios, qui per decubitum in partes quasdam fiebant.*” Comment. in Aph. 402.

micturition *takes place*; or, in consequence of the great relaxation,* sweating or vomiting *may occur*: and women have their menses *besides*. All these may effect a crisis; and even whatever approaches to these. But *in this case* the crises are different, and not so complete *as in the former case*.

12. If in an ardent fever a jaundice supervene on the seventh day, or later, and there be copious and troublesome ptyalism, (this applies to other cases as well as ardent fevers,) and if the fever cease without the appearance of any of these signs, the crisis will be such *as just described*, or abscesses of some large tumours will take place, or severe pains in consequence of the abscess will *be experienced*,

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* ἡ διὰ ὄρπην ισχυρὴ is the reading adopted by Fœsius, and therefore we follow it; but some versions, with great apparent propriety, read ἡ διαρροὴν ισχυρὴ, or a profuse diarrhoea, &c.

or perhaps a colliquation of the humours from heat.

13. Crises* and remissions† of those *symptoms* which indicate an ardent fever,

* The word *crisis* was applied not to the termination only of a disease, but frequently to the changes, whether favourable or unfavourable, which occurred in the state of its symptoms. “Ex quibus omnibus appareat, crisim tunc vocari in morbis, quando et magnæ perturbationes fiunt, et nova apparent phænomena, simulque hæc sequatur cita *mutatio* morbi in melius vel pejus.” Van Swieten Comment. in Aph. 587. It is used in this sense here.

† *Remissions*, &c. This may be thought at variance with the fact. It appears to be so at first sight; for it is well known that the greater the tendency of a continued fever to remission, the more favourable the case is. The meaning however evidently is, that those fevers in which the exacerbations are so great as to be very remarkable, are most apt to be of long continuance; whereas those in which they are scarcely perceptible are not dangerous, and will most likely terminate shortly.

show that the disease will be long. But if they are violent, death generally follows. Other ardent fevers (*which have not these remissions*) are not dangerous, and terminate on the seventh or fourteenth day. They usually pass into the lipyria,* continue about forty days, and terminate in the epialus.† The lipyria comes on

* *Lipyria*.—This word was applied by the ancient physicians to that species of fever in which the extremities were cold, whilst the internal parts of the body were burning with heat.

† The term *epialus* was applied to those fevers in which the patient was seized with rigors in the course of the disease ; it is hence called *febris algida, frigida cum tremore*, &c. It is supposed to be the fever designated among the Latins, by the term *quercera*. Gorrhaeus, a celebrated commentator on the writings of the ancient physicians, says that it was used to designate continued fevers, in which there were daily exacerbations, attended with chills and increase of heat. Other commentators suppose that it meant a mild or moderate fever ; and derive

and remits the same day, leaving a *violent* pain in the head. If the lipyria do not terminate in forty days, but be protracted *beyond this term*, and the headach continue, and be *accompanied* with delirium, purge the patient. If a jaundice supervene about the crisis of an ardent fever, it is not usual for sweating to come on, and it usually terminates in recovery.

14. The tertian* fever terminates generally in seven periods.

it from *ὑπνος lenis*, and *ἀλειφεν*, *incalescere*. This etymology seems indisputable, and is confirmed by the sense of the passage. It is reasonable to suppose that when a fever is verging to a favourable issue, it will abate in violence.

These varieties of fever are not now recognised as distinct species, or designated by particular names.

* Some copies read *terraprinos*, making the remark to apply to quartan fever. But in the 59th Apho-

15. When jaundice appears in violent fevers on the seventh, the ninth, or the eleventh day, it is a good sign, unless there be hardness of the right hypochondrium; if so, it is a doubtful case.

16. Acute diseases generally come to a crisis in fourteen days.*

17. Sweats which take place on the third, the fifth, the seventh, the ninth, the eleventh, the fourteenth, the twenty-first, and thirtieth days, effect the crisis of the fever. If they do not happen on these days, they indicate much distress.

18. The concoction of urine, effected by

rism of Book IV. the same is repeated of tertians; and the remark accords with the experience of modern physicians.

* Or, according to Dr. Sydenham, in 336 hours.

degrees, if perfect on the critical days, terminates the disease.

19. It is proper to compare the urine with the *condition* of ulcers. For when ulcers yield a white pus, it is a sign of an approaching cure; but if they produce a sanious humour they are bad. In like manner the urine affords indications; if it is limpid, investigate the cause of the disease, and remark its abatement; if this (*the cause*) has ceased to act, (*the urine remaining the same,*) though the other symptoms are such as they ought to be, no solution of the disease is to be expected.

19. If during a headach fever supervenes, and there is neither abatement of the fever nor removal of the pain, the fever is not critical.

20. Many of the symptoms of a slow

crisis, which has a favourable tendency, are the same as those of convalescence.

21. Soft tumours of the hypochondria, which are not painful, and yield to the touch, make the crises longer, but less dangerous, than do tumours of a contrary character. The same observation applies to tumours in other parts of the belly.

22. Urine, which, when voided, is not clear, though it *afterward* yield a white and smooth sediment, shows that the crisis is distant, and will not be so safe, as when the urine is *perfectly* good. If the urine is reddish, and deposites a lateritious and smooth sediment, it signifies that the disease will be of still longer continuance than in the preceding case, but wholly devoid of danger.

23. All gouty affections, not attended

with inflammation, terminate in forty days, and exhibit many signs of a slow but favourable crisis. If they have a fatal tendency, the crisis takes place in a day and a night, (24 hours.)

24. The symptoms of debility are the same as those of the operation of a purgative; disturbance of the stomach and bowels, with *evacuations* upwards and downwards, nausea, and such like feelings. If these symptoms disappear in a day and a night, it is well; if not, you may consider them fatal.

25. The worst sweats are such as are cold, and arise about the neck. They are signs of a long illness, and a fatal termination.

26. Dejections of a mixed nature, (of various colours,) though indeed not so speedily mortal as black and other fatal

discharges, are not less certainly so. Of this kind are such as resemble scrapings of *guts*, such as are bilious, bloody, greenish, (porraceous,) and black; and which sometimes are composed of all these mixed together, and sometimes of only some of them.

27. If the urine is sometimes clear, and sometimes yields a white and smooth sediment, it shows that *the disease* will be longer and less safe, than when the urine is perfectly good. If the urine is red and limpid for a long time, there is reason to fear that the patient will not be able to bear up until it be concocted; if the other symptoms, however, are salutary, you may expect an abscess in some of the parts below the diaphragm.

28. If in fevers the condition of the urine is variable, it is a sign that the disease will be long; and the patient

will be sometimes worse and sometimes better.

29. If the urine is variable in the commencement, and from being thin becomes thick, and then changes to thin again, the crisis will be uncertain, and attended with difficulty.

30. Cold sweats attending acute fever, are a fatal *presage*; in milder cases they foreshow a protraction of the disease.

31. In whatever part of the body there is heat or cold, there is disease; and from this proceed speedy changes in the whole body.

32. When the body becomes cold, and then hot, and changes of colour succeed, these *alternations* denote long continuance of the disease.

33. If the fever does not subside on the coming on of a sweat, it is a bad sign; for the disease is thus protracted, and it shows a superabundance of humours.

34. Cold sweats coming on in fevers foreshow a long continued illness. A copious perspiration occurring in health portends disease; less, however, in summer than in winter.

35. If you permit the excretions to stand, and they deposite a sediment like scrapings; if small in quantity, the disease is mild; if copious, it is severe. It is proper here to clear out the bowels.*

* There is difficulty in this passage. It is generally thought by commentators to be imperfect; or at least to be an imperfect expression of the idea contained in the 69th Aphorism of Book VII. It is a matter of doubt whether it has reference to the urinary or to the alvine excretion. In the aphorisms

36. When black bile appears in the alvine dejections, if it is abundant the disease is more severe than if it is in small quantity.

37. When the veins pulsate, and the face retains its healthy appearance, and the hypochondria are hard and distended,

it is placed immediately after remarks upon the former, and before an observation concerning the latter. The word *ἰποχωρίατα*, it is contended by some, is only applied to the alvine discharges, whereas others admit it to signify sometimes the urine. To prevent mistake it may be well to remark, that the aphorism to which we have referred is the 69th of lib. 7. according to Fœsius—67th of Almeloveen and Verhoofd—64th of Heurnius. The French translation of Gardeil renders the passage thus: “Les excréments qui sortent par l'organe qui leur est consacré, laissez les sortir ; s'ils déposent comme des raclures, et qu'il y en ait peu, la maladie est légère ; s'il y en a beaucoup, elle est considérable. Dans ce cas, il est bon de laver le ventre.”

the disease will be of long continuance, and will not terminate without a convulsion, a copious hæmorrhage from the nose, or severe pain.

38. Tremors of the hands portend a long continued disease, (fever,) or indicate a speedy and unfavourable crisis, which results in death.

39. Those who are to die in a short time, have violent symptoms from the commencement. They breathe with difficulty, do not sleep at night, and exhibit other dangerous symptoms.

40. If in a continued fever the patient suffer most on the fourth and fifth days, and the crisis do not take place on the eleventh, the case is usually fatal.

41. Those who labour under tetanus die

within four days ; if they survive this period they recover.*

* This remark is corroborated by modern experience. Dr. Cullen observes, that "the disease often proves fatal before the 4th day ; and when a patient has passed this period, he may be supposed to be in greater safety."* Hillary says it puts "a period to life on the 3d or 4th day."† Baron Boyer remarks, that "it generally proves fatal before the fourth day."‡ The fatality of tetanus within four days from its commencement, is more particularly remarkable in those cases which result from wounds of nerves and tendons : and it is said by those who are deeply versed in the writings of Hippocrates, that he seems to have been acquainted with no other causes of this disease. It is not always true that the patient is beyond the reach of danger after the fourth day ; but it certainly is a fact that the danger diminishes in proportion as the disease is protracted.

* Cullen's First Lines, vol. II. sec. 1206.

† Observations on the Changes of Air, and the Diseases of Barbadoes, p. 225.

‡ American edition of Boyer's Surgery, vol. I. p. 147.

42. If in ardent fevers, jaundice and hiccup supervene on the fifth day, they are fatal.*

43. Relapses take place in those who,

* This passage has been referred to, and quoted by some modern writers,* to prove that Hippocrates was acquainted with the yellow fever. It is not the design of this note to examine this question ; for its solution, it seems to us, can be of no advantage to either of the contending parties. We would however observe that we cannot discover, as Dr. Potter asserts, that "on this as well as all other occasions, Hippocrates attributes the origin of these symptoms to the *uncommon heat of the season.*" p. 6. That Hippocrates should know that "black vomit is a dangerous symptom," is no evidence of his being acquainted with yellow fever ; for it is no uncommon occurrence in our autumnal bilious fevers, and is frequently observed in the low typhoid fevers which prevail in the winter season.

* See a Memoir on Contagion, more especially as it respects the Yellow Fever, by Professor Potter of Baltimore, p. 6.

without having fever, are troubled with obstinate wakefulness, or disturbed sleep, whose strength diminishes, who have pains in their limbs, and in whom the fever disappears without the signs of a perfect solution, and on days that are not critical.

44. And although on the cessation of the fever, a sweat take place, if the urine is reddish, and yields a white sediment, you are to expect a relapse on the same day. These relapses, however, are not dangerous, and terminate on the fifth day.

45. If, after the termination of *the disease*, the urine is red, and has a lateritious sediment, a relapse is to be expected the same day; and, in this case, few recover.

46. The relapse of an ardent fever is usually attended with sweating; espe-

cially if the relapse continue as many days as the original disease. The fever returns even a third time, unless the relapse terminate on an odd day; especially if the urine was not concocted, and the other symptoms have not been good; this relapse takes place on a critical day; sometimes, however, notwithstanding these circumstances, a *third* relapse occurs, and even on a critical day.*

47. You are to expect a relapse on the dispersion of tumours, which, at the approach of the crisis, have arisen about the ears, but have not suppurated. In these cases you may expect that there will be some deposition about the joints. If the urine is thick and white, like that

* The text at this passage is very difficult and obscure; we translate it literally, but are not confident of having entered into the sense of the original.

which is voided on the fourth day of fevers attended with a sense of lassitude, it preserves *the patient* from such depositions; a hæmorrhage from the nose occurs in some cases, but is never critical on the fourth day. Suppuration occurring cures the disease.*

* We have endeavoured to discharge our obligation to preserve faithfully the meaning of the text; but, lest the reader should think our translation obscure in this place, we must inform him that this passage presents several difficulties. The first part of the aphorism is wholly omitted in some versions. The second is evidently taken from the 74th Aph. lib. 4. but is inconsistent with it: nasal hæmorrhages on the 4th day being here condemned, and in the aphorism being commended as greatly conducive to the cure: ἦν δε καὶ ἐκ τῶν πινῶν αἰυσπέργυντον καὶ πάντα ταῦχον λύεται. Some commentators assert the meaning of the text to be, “that hæmorrhages occurring in quartans are never critical;” others contend for the meaning we have given. Be this as it may, it is certain that Hippocrates in many other parts of his

48. Hæmorrhoidal discharges are beneficial in melancholic and phrenitic affections.

49. When mania occurs after the spontaneous cure of diseases,* it is removed

works condemns nasal hæmorrhages on the 4th day, and always designates them by *τεταρταῖαι*. The last clause, though universally retained, is generally suspected to be the addition of some transcriber : *καὶ τοῖς πᾶσα ἀποχωρέοντα οὐγιὰζειν νοῦσοις*. We think we have preserved its meaning. Fœsius however, in his note, supposes it to signify that nasal hæmorrhages never cure diseases in which suppuration is the usual termination. With great respect for so high authority, we confess we see nothing in the text to warrant such an interpretation.

* Fœsius, whom we generally follow, has *ὅτοι μαίνονται ἢ αὐτομάτη ἀπαλλασσόμενοι*, &c. but as this conjunction *ἢ* seems to us to destroy the consistency of the sentence, we have preferred the reading of Cornarius, by whom it is omitted.

by the coming on of a pain in the foot or the breast, or by a violent cough. If the mania disappear without the occurrence of any of these symptoms, blindness ensues.

50. Those who stutter, and have no command of their lips in speaking, have empyema on the removal of *this impediment in their speech.*

51. A violent pain in the lower parts, is removed by the occurrence of deafness, or a hæmorrhage from the nose.

52. Mania cures an habitual epilepsy.*

* It is well known that epilepsy is frequently kept up by habit, when the cause which originally produced it has ceased to act. If then its return be prevented until the system be freed from the influence of this habit, and forget, as it were, the morbid association to which it formerly was subject, the

53. A pain of the hips, distortion of the eyes, blindness, tumours of the testicles or mammae, occurring in ardent fevers, effect a solution of the disease ; the same effect is produced by a nasal hæmorrhage.*

disease may be radically and effectually removed. Accordingly the approach of puberty, an attack of fever, a cutaneous eruption, pregnancy, the predominance of some powerful passion, and even the application of a blister, by diverting, as it were, the attention of the system, have completely suspended the disease in persons who had long been subject to it.

* These terminations generally are so frequently observed that it is unnecessary to adduce examples of them. We would remark however that tumours of the parotid glands most commonly arise. It cannot be improper to inform the student, for whose use these notes were subjoined, that these parotid tumours should be opened before a fluctuation can be perceived ; for the matter which they form is so viscid, that a hardness will remain long after the commencement of suppuration. Indeed it

54. If a rigor come on in ardent fevers, sweating usually ensues. When a rigor

sometimes happens that no matter will be discharged on first making the incision. It may be laid down as a general rule that all glandular tumours should be opened early after suppuration takes place. There is to this rule one solitary exception : a *bubo* should never be lanced until the texture of the gland is completely dissolved. Concerning the critical *haemorrhage*, it may be remarked, that it is generally preceded by a pain in the head, a dimness of sight,* an itching of the nose, and the *pulsus dicrotus*,† or double-rebounding pulse. This pulse is so peculiar, and is said to be so infallible, that it is related of Galen, that perceiving it on a certain occasion, he immediately called for a basin, and had no sooner received it than the blood gushed from the patient's nose.

* Prognostics, Sect. 1. Aph. 32.

† This pulse gives at each diastole a double stroke to the finger. Can this be the *haemorrhagic* pulse of surgeons, the impression of which they say is peculiar, but indescribable?

comes on in these cases, a solution of the disease is the result.*

55. Tremors, in ardent fevers, are suspended by delirium.

56. If deafness come on in fevers, and the fever be not removed, delirium ensues necessarily; but it is removed by the occurrence of a nasal haemorrhage, a bi-

* The truth of this observation may at first view appear questionable. But it is a fact that when shivering occurs in a long-continued fever, a hot stage is induced, which is followed by sweating and a temporary apyrexia at least. This occurrence then is favourable, because it is an evidence of a tendency in the disease to assume the intermittent type.

May not the beneficial effect of cold affusion, as now practised in fevers, be explained upon this principle? It seems to suspend the febrile action, and to change the character of the disease, by inducing a paroxysm of a different type.

lious diarrhoea, a dysentery, or a pain in the hip or the knee.

57. A chill occurring in fevers, puts an end to them.

58. Those who are suddenly seized with pain, and elevation of the hypochondria, if they have also violent pains about the false ribs, will be relieved by blood-letting and purging; for fever does not violently attack weak parts.

59. If in dropsy water passes off by means of the veins into the bladder or intestines, a cure is effected.*

* These are the most usual outlets of dropsical effusions. Accordingly, diuretics and hydrogogue cathartics are the most effectual means that can be employed in dropsical cases. We subjoin this note to introduce a remedy which combines the advantages of both, and thus fulfils two indications at the same time: I refer to the supertartrate of potass.

60. A profuse diarrhoea occurring in leucophlegmasia, effects a cure.

This remedy is not new ; it has been for a long time, and is now almost universally used. But there are circumstances in its administration which so greatly influence its effects, and which are so apt to be disregarded, that its efficacy may be frustrated by the negligence of the prescriber. It is so extremely insoluble as to require twenty times its quantity of cold water to hold it in solution. When not perfectly dissolved, it is almost inert, and produces no sensible effect, but a disagreeable griping or colicky sensation, and sometimes a slight ptyalism. Now, so large a quantity of water as is necessary to dissolve it, would be injurious in the disease. The addition of a small quantity of the borate of soda will so greatly promote its solubility, as to render very little water necessary for its solution. For a full exposition of the advantages and effects of this article, the reader may refer to Home's Clinical Experiments and Histories, and Ferriar's Medical Histories and Reflections. A singular method has been lately recommended for procuring a discharge of urine in dropsies : it is long-continued, gentle *friction* of the abdomen, with the fingers dipped in oil.

61. Those who for a long time are troubled with diarrhoea and cough, are relieved by the coming on of severe pains in the feet.

62. If there is a tendency to a change in the nature of the disease, and the patient has not diarrhoea, and passes nothing but wind, it is evident that there is no abundance of humours ; and you may give any thing with safety.*

63. In iliac passion give a good quantity of pure wine;† let it be taken cold, and gradually, until sleep is induced, or pain in the legs comes on. The occurrence

* This passage is very obscure. Fœsius considers it imperfect.

† In cases of simple colic, unattended with inflammation, and particularly in such as result from indi-

of a fever, or diarrhoea,* removes the disease.

64. A discharge of pus by the ears or the nose, removes violent pains in the head.

gestion and flatulence, wine would no doubt prove as useful as the more fashionable carminative cordials. As an *antispasmodic* it has been found very efficacious in hydrophobia† and tetanus.

* The word we have translated *diarrhaea* is δυσεντερίη, which is not applied to real dysentery only, but is also used to signify any unusual discharge from the bowels. That this is its signification here is evident from the sense of the passage ; and a parallel sentence reads, δυσεντερίη ἄγεν οδύνας, dysenteria sine dolore. Epidem. lib. II. 1056 fol. Foesius.

† Dr. Richard Pearson has lately recommended wine in hydrophobia. Celsus was acquainted with its virtue in this disease : he recommends, “multum, meracumque *vinum*, quod omnibus venenis contrarium est.” Lib. 5. cap. 27. De Medicina.

65. Those who in *full* health experience suddenly a pain in the head, and immediately lose the power of speech, and snore, die in seven days, unless fever come on.*

66. In violent pains of the head, if any of the superior parts are affected, apply the cupping-glass. If a pain in the hips, or the knees, or a difficulty of breathing come on, the *affection of the head* is relieved.†

* "In some cases it goes off entirely by diarrhoea, &c. and sometimes by the appearance of fever." Thomas' Practice, p. 286.

† The meaning of this passage is not very clear. The word *πονος*, from which is derived the verb which we have rendered *affected*, has so great a variety of acceptations, that it gave occasion to Cicero to ridicule the *inopia verborum* of the Greeks. It signifies usually *labor*, *dolor*, &c. sometimes *fatigatio*.

67. A diarrhoea occurring in ophthalmia, is beneficial.*

and *molestia** generally, or any kind of injury. The verb *πονέω*, signifies *laboro, doleo*; but is also rendered *fatigo, lassesco*, and is used in this last sense by Hippocrates himself, in Aph. 48. Book II. It is in this sense we take it here. We conceive it to refer to that peculiar sensation of fatigue or torpor which attends affections of the head. If this acception be admitted, the meaning of the passage is very evident.

* Cathartics are considered by some as peculiarly beneficial in all inflammatory affections about the head. However this may be, it is a fact that they are serviceable in ophthalmia. Monsieur Assalini found them necessary in the ophthalmia of Egypt, and particularly in those cases which had supervened to diarrhoea.† Dr. Dewar observes, that “it (the

* Indeed, so extensively is it applied in this signification, that it is even used for *injustitia, iniquitas, &c.* and particularly in the Sacred Scriptures.

† Neale's translation of Assalini's Observations on the Plague, the Dysentery, and the Ophthalmmy of Egypt. Lond. 1804, p. 140.

68. If fever supervene in convulsions or tetanus, it suspends them.*

ophthalmia) disappeared on the patient being attacked with diarrhœa.”* And Dr. Underwood remarks, that the ophthalmia of infants is frequently carried off by the coming on of a purging.†

* The doctrine of an *equilibrium of action* must be admitted to a certain extent. The adherents of Mr. John Hunter have contended for this prominent principle of his system, with a blindness which could discern no exceptions. They thus have deprived it of the only practical importance it could possess ; for no general rule can be of much advantage until its exceptions are ascertained, and the cases in which it is applicable are precisely defined. It is not our intention, nor indeed would it be proper here, to enter into an examination of the doctrine. Suffice it to observe, that we here see the supervention of one powerful action in the system completely suspending another ; and thus verifying and exemplifying the

* Dewar on Diarrhœa and Dysentery, p. 36.

† Diseases of Children, Vol. 2, p. 232.

69. If convulsions come on in fever, the

axiom, that “when two affections occur in different parts of the body, the more violent will overcome the other.”* Aphorism 46. Book II. It is upon this principle of *counter-impression* that mercury, wine, and electricity are beneficial in tetanus; and that ammonia and ether are among the most powerful antispasmodics we possess. In a late communication from a professional correspondent I have been informed that the actual cautery has been used in tetanus with success. I forbear to detail particulars, as the case has been laid before the Medical Society of Charleston, South Carolina, and will shortly be published; and more especially, as I do not approve the hazardous and dismaying practice which was pursued in this instance. I would merely remark, that the application of the cautery produced an instantaneous resolution of an obstinate opisthotonus.

With a reference to this law of the œconomy, Dr. Richard Pearson, of Birmingham, has proposed the exciting of a fever in hydrophobia. The indication

* In accordance with this are the words of the Poet:—

“ ————— where the greater malady is fix'd

“ The lesser is scarce felt ————— ”

fever ceases the same day, or on the next, or the third day.*

is certainly to reduce the spasm; and if, as Dr. Rush supposes, fever is a convulsed state of the blood vessels, and only a grade of convulsive action, the production of fever is an evidence of its fulfilment. The following comment of Sir Conrad Sprengell, upon the 57th Aphorism of Book IV., in which the fact laid down in this passage is repeated, while it is a remarkable coincidence with the theory of Dr. Rush, is very apposite in this place. "Convulsions," says he, "are violent commotions and involuntary contractions of the muscles, but fevers only a less degree of such contraction in the smaller muscular fibres. Hence they are but a less degree of convulsions, and therefore a good sign that the convulsions are going off.*

* This is another example of the equilibrium of action. It may however be remarked, that Hippocrates lays it down, that "children above seven years of age, and adults, are not seized with convul-

* Sprengell's Translation of the Aphorisms of Hippocrates. London, 1735.

70. When spasms seize the hands and feet, they threaten mania.

71. When the veins of the hands pulsate, the countenance is good, and the hypochondria are hard and swollen, the disease will be long, but without convulsions.*

sions in fevers, unless some very violent and dangerous symptoms appear.” Prog. Sect. III. Aph. 35. He says too, that “it is better that a fever supervene in convulsions, than that the latter come on in the former.” Aph. 26. lib. II. He could not therefore have considered the occurrence of convulsions in fevers as always favourable: that they are so sometimes it is not necessary to prove.

* Cornarius and Fœsius consider that this passage should be rescinded, because, if not an interpolation, the reading is certainly incorrect. The latter commentator accordingly gives no translation of it. The aphorism occurs once before in this book; (37;) but it is there stated that convulsions will occur, whereas it is here denied. This circumstance con-

firms the suspicion that it is not genuine. This deceitful handling of the writings of Hippocrates will account for the many contradictions that occur in his works, and which have brought upon him the charge of inconsistency.

FINIS.

I N D E X.

The capital figures point out the Sections—the smaller figures the Aphorisms of the Prognostics, unless preceded by C. when the reference is to the Crises. n. signifies that a note is subjoined.

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ERRATA.

P. 12, l. 19, for *το θείον* read *τι θείον*.

P. 53, l. last, for *ομόχρων* read *ομόχρων*.

P. 76, l. 10, for 40 read 50, and so in the three succeeding
 aphorisms.



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